

FILE 'HOME' ENTERED AT 19:04:23 ON 05 JUN 2006)

FILE 'CAPLUS, MEDLINE' ENTERED AT 19:04:30 ON 05 JUN 2006

L1	12807 S THC OR TETRAHYDROCANNABINOL
L2	12883 S L1 OR DRONABINOL
L3	48 S L2 AND AEROSOL
L4	3 S L3 AND (HFA OR HFC OR HYDROFLUORALKANE OR HYDROFLUOROCARBON)
L5	3 DUPLICATE REMOVE L4 (0 DUPLICATES REMOVED)

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Delta-9-**tetrahydrocannabinol** solution metered dose inhalers and methods of use  
 AB The present invention provides therapeutic formulations for solns. of  $\Delta^9$ - **tetrahydrocannabinol** ( $\Delta^9$ - **THC**) to be delivered by metered dose inhalers. The formulations, which use non-CFC propellants, provide a stable **aerosol**-deliverable source of  $\Delta^9$ - **THC** for the treatment of various medical conditions, such as: nausea and vomiting associated with chemotherapy-muscle spasticity; pain; anorexia associated with AIDS wasting syndrome, epilepsy; glaucoma; bronchial asthma; and mood disorders. A pressurized metered dose inhaler contained  $\Delta^9$ - **THC** 0.13, ethanol 5, and **HFA** 134a 95%. The blood levels of  $\Delta^9$ - **THC** following **aerosol** exposure 20, 40, or 60 mg delivered increased in a dose dependent fashion and were comparable to the blood levels produced by i.v. injection of 3 and 10 mg/kg  $\Delta^9$ - **THC**. Ethanol, propanol, propylene glycol, glycerol, and polyethylene glycol.

ACCESSION NUMBER: 2002:185600 CAPLUS  
 DOCUMENT NUMBER: 136:236866  
 TITLE: Delta-9-**tetrahydrocannabinol** solution metered dose inhalers and methods of use  
 INVENTOR(S): Peart, Joanne; Byron, Peter R.; Lichtman, Aron H.; Martin, Billy R.  
 PATENT ASSIGNEE(S): Virginia Commonwealth University, USA  
 SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 273,766.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002031480	A1	20020314	US 2001-944221	20010904
US 6713048	B2	20040330		
US 6509005	B1	20030121	US 1999-273766	19990322
US 2004258622	A1	20041223	US 2004-759280	20040120
PRIORITY APPLN. INFO.:			US 1998-105850P	P 19981027
			US 1999-273766	A2 19990322
			US 2001-944221	A1 20010904

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Pharmaceutical compositions for cannabis compounds  
 AB The present invention relates to an improved mode of administration for cannabis and its natural and synthetic derivs. A pharmaceutical composition suitable for sublingual **aerosol** or spray delivery of is provided. The formulation may be dispensed using a pump spray or the formulation may include a propellant, such as butane, 1,1,1,2-tetrafluoroethane (**HFC**-134a) or 1,1,1,2,3,3,3-heptafluoropropane (**HFC**-227). The term cannabis is used herein to refer to all physiol. active substances derived from the cannabis family of plants and synthetic cannabis analogs and derivs., precursors, metabolites etc., or related substances having cannabis-like physiol. effects. For example, a composition comprising  $\Delta^9$ - **tetrahydrocannabinol** ( $\Delta^9$ - **THC**) with **HFC**-134a suitable for use in a spray device can be formulated from the following ingredients:  $\Delta^9$ - **THC** 0.7%, 96% ethanol 13.2%, peppermint oil 1.4%, and **HFC**-134a 84.7%.

ACCESSION NUMBER: 2001:676580 CAPLUS  
 DOCUMENT NUMBER: 135:231709  
 TITLE: Pharmaceutical compositions for cannabis compounds  
 INVENTOR(S): Ross, Calvin

PATENT ASSIGNEE(S): GW Pharma Limited, UK  
 SOURCE: PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066089	A2	20010913	WO 2001-GB1027	20010309
WO 2001066089	A3	20020221		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
GB 2361869	A1	20011107	GB 2000-5718	20000309
GB 2361869	B2	20040922		
CA 2402020	AA	20010913	CA 2001-2402020	20010309
EP 1280515	A2	20030205	EP 2001-910026	20010309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003533439	T2	20031111	JP 2001-564742	20010309
AU 782991	B2	20050915	AU 2001-37608	20010309
HK 1041446	A1	20050513	HK 2002-103066	20020424
NO 2002004222	A	20021106	NO 2002-4222	20020904
ZA 2002007161	A	20031205	ZA 2002-7161	20020905
US 2003191180	A1	20031009	US 2003-221066	20030506
PRIORITY APPLN. INFO.:			GB 2000-5718	A 20000309
			GB 2001-1743	A 20010123
			GB 2001-1744	A 20010123
			WO 2001-GB1027	W 20010309

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI  $\Delta$ 9- **tetrahydrocannabinol** solution metered dose inhalers and methods of use  
 AB The present invention provides therapeutic formulations for solns. of  $\Delta$ 9- **tetrahydrocannabinol** ( $\Delta$ 9- **THC**) to be delivered by metered dose inhalers. The formulations, which utilize non-CFC propellants, provide a stable **aerosol**-deliverable source of  $\Delta$ 9- **THC** for the treatment of various medical conditions, such as: nausea and vomiting associated with chemotherapy; muscle spasticity; pain; anorexia associated with AIDS wasting syndrome; epilepsy; glaucoma; bronchial asthma; and mood disorders. A composition was prepared containing  $\Delta$ 9- **THC**, ethanol, and **HFA** 134a propellant.

ACCESSION NUMBER: 2000:290799 CAPLUS  
 DOCUMENT NUMBER: 132:313709  
 TITLE:  $\Delta$ 9- **tetrahydrocannabinol** solution metered dose inhalers and methods of use  
 INVENTOR(S): Peart, Joanne; Byron, Peter; Lichtman, Aron; Martin, Billy  
 PATENT ASSIGNEE(S): Virginia Commonwealth University, USA  
 SOURCE: PCT Int. Appl., 25 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000024362	A2	20000504	WO 1999-US24486	19991020
WO 2000024362	A3	20000824		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,				
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,				
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,				
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,				
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6509005	B1	20030121	US 1999-273766	19990322
CA 2344637	AA	20000504	CA 1999-2344637	19991020
EP 1124551	A2	20010822	EP 1999-965726	19991020
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO				
BR 9915095	A	20020115	BR 1999-15095	19991020
JP 2002528399	T2	20020903	JP 2000-577974	19991020
AU 764119	B2	20030807	AU 2000-21430	19991020
HK 1042846	A1	20060120	HK 2002-103979	20020528
PRIORITY APPLN. INFO.:			US 1998-105850P	P 19981027
			US 1999-273766	A 19990322
			WO 1999-US24486	W 19991020

## Refine Search

### Search Results -

Terms	Documents
L9 and (HFA or HFC or hydrofluoroalkane or hydrofluorocarbon)	22

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L10





### Search History

 DATE: Monday, June 05, 2006    [Printable Copy](#)    [Create Case](#)

#### Set Name Query

side by side

#### Hit Count Set Name

result set

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR*

 L10    L9 and (HFA or HFC or hydrofluoroalkane or hydrofluorocarbon)    22    [L10](#)

 L9    L8 and aerosol    856    [L9](#)

 L8    THC or tetrahydrocannabinol    157762    [L8](#)
*DB=PGPB,USPT; PLUR=YES; OP=OR*

 L7    (Aron adj H) near Lichtman    5    [L7](#)

 L6    (Peter adj R) near Byron    34    [L6](#)

 L5    Joanne near Peart    4    [L5](#)
*DB=USPT; PLUR=YES; OP=OR*

 L4    6060069.pn.    1    [L4](#)

 L3    5492688.pn.    1    [L3](#)

 L2    5190029.pn.    1    [L2](#)

 L1    5182097.pn.    1    [L1](#)

END OF SEARCH HISTORY



## Inventor Name Search

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Additionally, enter the **first few letters** of the Inventor's First name.

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## Inventor Name Search

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**Last Name**

Byron

**First Name**

Peter

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